

Name: \_\_\_\_\_

PC: Vertex Form Practice

Date: \_\_\_\_\_

Ms. Loughran

Put each of the following quadratics in vertex form, make a graph of each and then find all of the following for each:

- (a) the vertex
- (b) the axis of symmetry
- (c) the  $x$ -intercepts, if any
- (d) the  $y$ -intercepts
- (e) the domain
- (f) the range

1.  $y = x^2 - 2x - 4$

2.  $y = 2x^2 - 4x + 1$

3.  $y = 3x^2 + 6x + 10$

4.  $y = -2x^2 + 12x - 14$

5.  $y = -x^2 - 2x - 3$

6.  $y = 3x^2 + 6x - 3$